

# FOREST STEWARDSHIP MANAGEMENT PLAN

Prepared For: Choctaw BOE

Prepared By: Bubba Pope MS Forestry Commission

Time Period Covered by This Plan: 2012 - 2021

Date Plan Prepared: 2012-02-16

Plan Type: Stewardship / Stewardship

This plan was developed in accordance with the rules of the Stewardship program.

**Property Name: Eupora S16-19N-10E** 

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## LANDOWNER INFORMATION

Name: Choctaw BOE Mailing Address: PO Box 398

City, State, Zip: Ackerman, MS 39735 Country: United States of America

Contact Numbers: Home Number:

Office Number: 662-285-6239

Fax Number:

E-mail Address:

Social Security Number (optional):

## FORESTER INFORMATION

Name: Bubba Pope, Service Forester

Forester Number: 01004

Organization: MS Forestry Commission

Street Address: PO Box 295

City, State, Zip: Ackerman, MS 39735

Contact Numbers: Office Number: 662-285-6728

Fax Number:

E-mail Address: spope@mfc.state.ms.us

## PROPERTY LOCATION

County: Choctaw Total Acres: 647 Latitude: -89.25 Longitude: 33.51

Section: 16 Township: 19N Range: 10E

## **DISCLAIMER**

Some forest practices may cause temporary adverse environmental or aesthetic impacts. These practices will only cause short-term adverse impacts where they are installed. Special efforts will be made to minimize adverse effects when carrying out any of the practices. Examples include: site preparation, planting, prescribed fires, firebreak installation and maintenance, road installation and maintenance, pesticide applications and timber harvesting.

This information was derived from a small sampling of the forest resources. It reflects a statistical estimation that is only intended to be accurate enough for the purposes of making decisions for the short-term management of these resources. These estimations are temporally static. Events and circumstances may occur within the survey area that will physically alter the forest resources and therefore will not be reflected in the plan.

## INTRODUCTION

This Forest Stewardship Management Plan will serve as a guide for accomplishing the goals and objectives for your property. In addition to addressing your specific goals and objectives, this plan includes recommendations for maintaining soil and water quality and

protecting your forest from insects, disease, and wildfire. Recommendations are based on observation and assessment of the site.

## **OBJECTIVES**

#### Fire Protection

The goal is to protect the resource from wildfires, by establishing and maintaining firebreaks around the property; annually inspect possible signs of insect infestations and disease; and prohibit grazing until terminal bud is beyond reach of livestock.

#### Timber Production

The goal is to produce high quality sawtimber. This will be accomplished through reforestation and timber stand improvement practices such as herbicide applications, prescribed burning, thinning at specified intervals, and other silvicultural practices. Forestry Best Management Practices will be implemented to prevent erosion and protect water quality.

## PROPERTY DESCRIPTION

## General Property Information

This section is known as the "Eupora" section and is located on Highway 9. The majority of the section is loblolly pine. Eupora has approximately 619 forested acres of various sized timber. This section has 40 non-forested acres. There are no management activities being recommended during this plan for the non-forested acres.

#### Water Resources

The Big Black Water Basin runs through this property, SMZ's will be used to protect this at all times. This is a significant drain. Intermittent streams and drains were also identified and will be managed in accordance with Mississippi's Best Manage Practices.

## Timber Production

The goal is to maximize the production of high quality timber. This will be accomplished through the application of timely thinning and other silvicultural practices designed to enhance timber quality and growth. Forestry Best Management Practices will be implemented to prevent erosion and protect water quality.

## Threatened and Endangered Species

No threatened and endangered species were identified during the reconnaissance and evaluation of your property.

*Interaction with Surrounding Property* 

Prescribed practices should be carried out in a manner that will minimize adverse impacts on surrounding properties. Consideration should be given to potential air, water, visual, and other impacts. In addition, practices carried out should have positive effects on the surrounding community such as improved wildlife habitat and soil stabilization.

Soils General

Soils were evaluated on the property to determine the suitability of the site for the proposed activities. Forest practices were planned so as to minimize erosion or other adverse effects on the soil. The following soils are identified for this property:

## **Archeological or Cultural Resources**

Archeological or Cultural Resources

These areas can range from churches, old cemeteries or Indian mounds to old home sites or other areas of historical significance.

An Indian Mound is located on the North End of the section in the Big Black Basin, West of highway 9. This site has been buffered and designated around the site. No forest management activities will occur inside of this protected area.

## GENERAL PROPERTY RECOMMENDATIONS

Forest Protection

A health vigorously growing stand is the best defense to an attack form a variety of forest insects, plants and pathogens.

Insects and Diseases

Trees are subject to attack from insects and diseases. Different insects and diseases affect trees according to the age, species, and condition of the trees. Planted stands of pines and pure stands of hardwoods are particularly susceptible to attack. Since there are many different insects and diseases, no attempt will be made here to explain all of them. The property should be inspected at least annually for possible signs of insect and disease activity. Some things to look for are:

- Unseasonable leaf fall
- Discoloration of leaves or needles
- Pitch pockets on pine trees
- · Heavy defoliation of hardwood leaves
- Groups of three or more dying trees within a stand

This list does not cover all instances of insect or disease attacks. If anything unusual is noticed, report it to a forester. In most cases, insect and disease problems can be controlled if discovered early.

#### Fire Protection

Your forest should be protected from wildfire at all times. The best way to protect your investment is by establishing and maintaining firebreaks around the property. Guidelines for establishment and maintenance of firebreaks may be found in Mississippi Forestry Commission publication #107, *Mississippi's Best Management Practices* 

## Grazing

Tree seedlings should be protected from grazing until such time as the terminal bud of the sapling is beyond reach of livestock. Domestic livestock should be denied access to the tree planting area.

## **Boundary Lines**

Boundary lines will be maintained by the Mississippi Forestry Commission on a 3 year rotation. All lines will be marked in red paint.

## **SOIL TYPES**

#### OrD2

The Ora component makes up 90 percent of the map unit. Slopes are 8 to 12 percent. This component is on uplands. The parent material consists of loamy fluviomarine deposits. Depth to a root restrictive layer, fragipan, is 18 to 42 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 30 inches during February, March, April. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria. Loblolly Site Index = 83.

#### W

Generated brief soil descriptions are created for major soil components. The Water area is a miscellaneous area.

## Gu

The Guyton component makes up 90 percent of the map unit. Slopes are 0 to 1 percent. This component is on terraces. The parent material consists of loamy alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is occasionally flooded. It is not ponded. A seasonal zone of water saturation is at 9 inches during January, February, March, April, May, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria. Loblolly Site Index = 95.

#### MaE

The Maben component makes up 90 percent of the map unit. Slopes are 8 to 15 percent. This component is on uplands. The parent material consists of stratified sandy to clayey

marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria. Loblolly Site Index = 83.

#### MP

The Maben component makes up 71 percent of the map unit. Slopes are 12 to 35 percent. This component is on uplands. The parent material consists of stratified sandy to clayey marine deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria. The Providence component makes up 24 percent of the map unit. Slopes are 12 to 15 percent. This component is on uplands. The parent material consists of silty loess over sandy marine deposits. Depth to a root restrictive layer, fragipan, is 18 to 38 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 18 inches during January, February, March. Organic matter content in the surface horizon is about 2 percent. This soil does not meet hydric criteria.

#### OrD3

The Ora component makes up 90 percent of the map unit. Slopes are 8 to 12 percent. This component is on uplands. The parent material consists of loamy fluviomarine deposits. Depth to a root restrictive layer, fragipan, is 18 to 42 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 30 inches during February, March, April. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria. Loblolly Site Index = 83.

#### Oa

The Oaklimeter component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains. The parent material consists of silty alluvium deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is occasionally flooded. It is not ponded. A seasonal zone of water saturation is at 24 inches during January, February, March, November, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria. Loblolly Site Index = 90.

Cf

The Chenneby component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains. The parent material consists of silty alluvium deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 21 inches during January, February, March. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria. Loblolly Site Index = 100.

#### CH

The Chenneby component makes up 50 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains. The parent material consists of silty alluvium deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is moderate. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 21 inches during January, February, March. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria. The Arkabutla component makes up 37 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains. The parent material consists of silty alluvium deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is very high. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 15 inches during January, February, March, April. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4w. This soil meets hydric criteria.

## Ur

The Urbo component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains. The parent material consists of clayey alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches is high. Shrink-swell potential is moderate. This soil is occasionally flooded. It is not ponded. A seasonal zone of water saturation is at 18 inches during January, February, March. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria.

#### Ви

The Bude component makes up 95 percent of the map unit. Slopes are 0 to 2 percent. This component is on uplands. The parent material consists of loess deposits. Depth to a root restrictive layer, fragipan, is 18 to 40 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 11 inches during January, February, March, April. Organic matter content in the surface horizon is about 1 percent.

Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria. Loblolly Site Index = 90.

## TaC2

The Tippah component makes up 90 percent of the map unit. Slopes are 5 to 8 percent. This component is on uplands. The parent material consists of loess deposits. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches is high. Shrink-swell potential is high. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 26 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria. Loblolly Site Index = 78.

#### Mt

The Mantachie component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains. The parent material consists of loamy alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches is high. Shrink-swell potential is low. This soil is occasionally flooded. It is not ponded. A seasonal zone of water saturation is at 15 inches during January, February, March, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria. Loblolly Site Index = 98.

## **STRATA**

Strata 1
Strata Description
Strata 1 - 42 Acres

Contains stands 4 and 12.

This is 42 acres of pine plantation that was harvested and replanted with loblolly pines in the year of 2004.

#### Strata Recommendations

This area is recommended to let grow until around the year of 2020-2021 for its first thinning.

## **Activity Recommendations**

Harvest

Recommended that this area be first thinned in the year 2021. The area should be thinned to 80 square feet basal area. This will be achieved by thinning the weaker and diseased trees first to achieve the 80 square feet basal area.

Strata 2
Strata Description
Strata 2 - 182 Acres

Contains stands 2, 3, and 9.

This strata is 182 acres of hardwoods that is proctecting the Big Black Water Basin that disects the tract from east to west.

#### Strata Recommendations

Due to a toranado in the spring of 2011, some of the area will have to be harvested and replanted. once acres have been determined, site prep and activities will be added.

Strata 4
Strata Description
Strata 4 - 139 Acres

Contains stand 6.

This area is 139 acres, the area was harvested, site prepped, and re-planted with genetically improved loblolly pines in 1992.

## Strata Recommendations

This area should be looked at around the year 2018 for a possible first thinning.

## **Activity Recommendations**

Harvest

Recommended that this area be first thinned in the year 2018. The area should be thinned to 80 square feet basal area. This will be achieved by thinning the weaker and diseased trees first to achieve the 80 square feet basal area.

Strata 7
Strata Description
Strata 7 - 147 Acres

Contains stand 5.

This area is 147 acres of pine chip-n-saw that was planted in 1986. The area has been thinned twice.

## Strata Recommendations

This area is scheduled for a possible final harvest in the year 2015 if prices are suitable. A torando in the spring of 2011 also did damage to this area. One clean up for this strata is complete the acres and activities will be corrected.

## **Activity Recommendations**

#### Harvest

If prices are suitable, it is recommended that the area have a final harvest in the year 2015.

## Regeneration

This area should be hand planted in genetically improved loblolly pine seedlings at a rate of 691 TPA. Survival should be greater than or equal to 400 TPA after the first summer.

## Site Preparation

This area should be aerial sprayed in the summer of 2016 for the purpose of site prep. This will prepare the site to be planted that winter

Strata 10 Strata Description Strata 10 - 97 Acres

Contains stand 7.

This area is 97 acres of mature old growth pine sawtimber. The torando of 2011 also destroyed some of this timber. A regeneration harvest for 2012 is scheduled.

## Strata Recommendations

The area will be clear cut in the fall of 2011 or spring of 2012.

## **Activity Recommendations**

## Regeneration

This area should be hand planted in genetically improved loblolly pine seedlings at a rate of 691 TPA. Survival should be greater than or equal to 400 TPA after the first summer.

## Site Preparation

This area should be site-prep aerial sprayed in the fall of 2012. The purpose of the ariel spray will be to control hardwood compettion so that the planted pine seedlings can survivie and grow.

#### Harvest

If prices are suitable, it is recommended that the area have a final harvest in the year 2012.

## OTHER PLAN ACTIVITIES

Boundary Lines

Line Description

The boundary lines are painted every 4 years in either red or orange boundary paint to make sure the property lines are clearly visible.

## Line Recommendations

By keeping lines well painted, it makes it easier to find property lines.

## **Activity Recommendations**

**Property Activities** 

Routine inspections and general maintenance of the roads, Firelanes, and boundary lines will ensure overall appearance and aesthetics of the property.

#### Fire Control

Line Description

These lines are used for easy access and maintained for easy fire control.

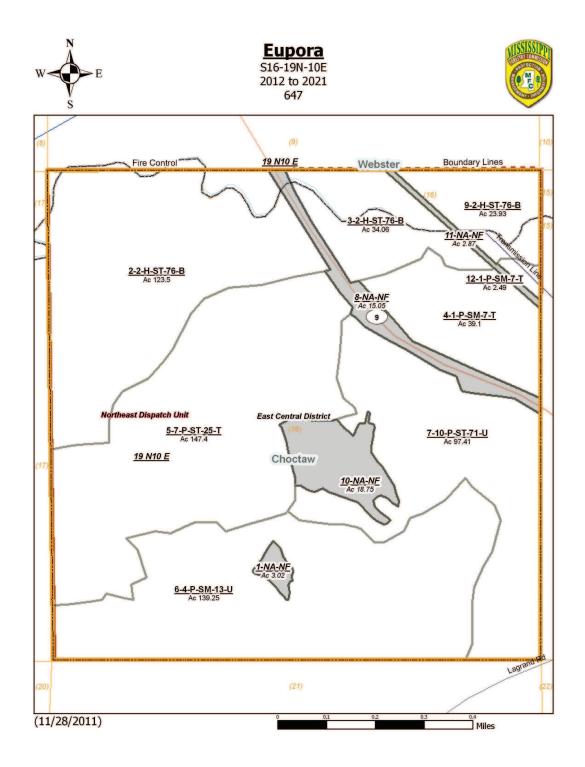
#### Line Recommendations

Lines should be pushed and maintained every 4 years.

## **Activity Recommendations**

Fire Protection

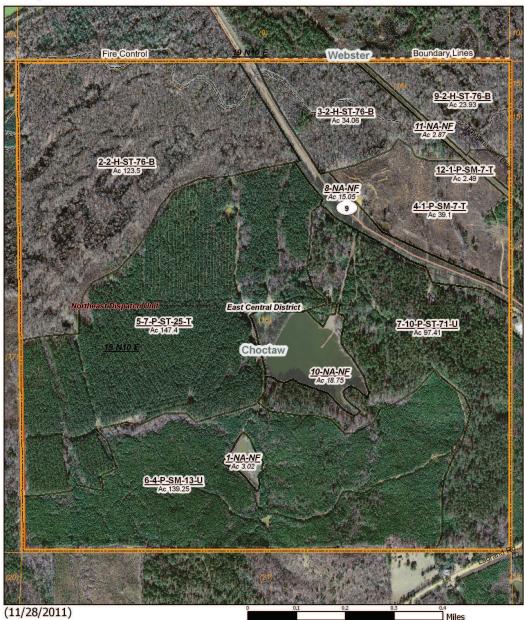
Due to well kept fire lanes, accessible roads, and good communication with the community makes for easier fire protection.





Eupora S16-19N-10E 2012 to 2021 647





## Eupora





## Activities by Client and FY Report

Filters Applied: County: Choctaw
Client Class:

District:

Client: Choctaw BOE STR: 16 19N 10E Year: 2012 Through 2021

Client Name	Year	Activity Name	Practice	STR	Est. Acres	Est. Cost	Est. Revenue
Choctaw BOE							
	2012						
		Harvest					
			Regeneration				
				16 19N 10E	97	\$2,425.00	\$137,740.00
				Totals	97	\$2,425.00	\$137,740.00
				m 1	Summary for 'Act_Name' = Harvest	#0.40 <u>7.00</u>	Ø1 0F F 40 00
				Totals	97	\$2,425.00	\$137,740.00
		Site Preparation					
			Broadcast				
				16 19N 10E	97	\$9,700.00	\$0.00
				Totals	97	\$9,700.00	\$0.00
				TD 4 1	Summary for 'Act_Name' = Site Prepa		<b>#0.00</b>
				Totals	97	\$9,700.00	\$0.00
				Totals	Summary for 'PlanYear' = 2012 194	\$12,125.00	\$137,740.00
	2013						
		Regeneration					
		0	Plant				
				16 19N 10E	97	\$9,700.00	\$0.00
				Totals	97	\$9,700.00	\$0.00
				100015	Summary for 'Act_Name' = Regenerat		ψ0.00
				Totals	97	\$9,700.00	\$0.00

Thursday, February 16, 2012

Client Name	Year	Activity Name	Practice	STR	Est. Acres	Est. Cost	Est. Revenue
				Totals	Summary for 'PlanYear' = 2013 97	\$9,700.00	\$0.00
	2015						
		Harvest					
			Final				
				16 19N 10E	147	\$5,145.00	\$194,040.00
				Totals	147	\$5,145.00	\$194,040.00
				Takala	Summary for 'Act_Name' = Harvest	<b>PF 145 00</b>	¢104.040.00
				Totals	147 Summary for 'PlanYear' = 2015	\$5,145.00	\$194,040.00
				Totals	147	\$5,145.00	\$194,040.00
	2016						
		Regeneration					
			Plant				
				16 19N 10E	147.4	\$14,740.00	\$0.00
				Totals	147.4	\$14,740.00	\$0.00
					Summary for 'Act_Name' = Regenerat	ion	
				Totals	147.4	\$14,740.00	\$0.00
		Site Preparation					
			Broadcast				
				16 19N 10E	147	\$14,700.00	\$0.00
				Totals	147	\$14,700.00	\$0.00
				Totals	Summary for 'Act_Name' = Site Prepa	ration \$14,700.00	\$0.00
				Totals	Summary for 'PlanYear' = 2016	\$14,700.00	φυ.υυ
				Totals	294.4	\$29,440.00	\$0.00
	2018						
		Harvest					
			Thin				

Thursday, February 16, 2012

Client Name	Year	Activity Name	Practice	STR	Est. Acres	Est. Cost	Est. Revenue
				16 19N 10E	139	\$4,865.00	\$20,850.00
				Totals	139	\$4,865.00	\$20,850.00
					Summary for 'Act_Name' = Har		
				Totals	139	\$4,865.00	\$20,850.00
				m 1	Summary for 'PlanYear' = 2018		\$20.0 <u>50.00</u>
				Totals	139	\$4,865.00	\$20,850.00
	2021						
		Harvest					
			1st Thin				
				16 19N 10E	2	\$70.00	\$300.00
					39.1	\$1,368.50	\$5,865.00
				Totals	41.1	\$1,438.50	\$6,165.00
					Summary for 'Act_Name' = Har	vest	
				Totals	41.1	\$1,438.50	\$6,165.00
					Summary for 'PlanYear' = $2021$		
				Totals	41.1	\$1,438.50	\$6,165.00
				m 1	Summary for 'ClientName' = Ch		
				Totals	912.5	\$62,713.50	\$358,795.00
Grand Totals					912.5	\$62,713.50	\$358,795.00

Thursday, February 16, 2012